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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| EXAMINER |
|---|
| SWOPE, SHERIDAN |

| ART UNIT | PAPER NUMBER |
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| 1652 | 9 |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/018,875 | SHIMA ET AL. | |
| | Examiner | Art Unit | |
| | Sheridan L. Swope | 1652 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 April 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) *3 and 9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-8 and 10-13* is/are rejected.

7)☒ Claim(s) *1,2,4-8 and 10-13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☒ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

Applicant's election with traverse of Invention II, Claims 1, 2, and 10-13, in part, and 4-8 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that "No support is provided for the position stated in the Official Action; broad statements of related art cannot be a basis for a restriction requirement.". This argument is not found to be persuasive. The technical feature linking Groups I-III appears to be that they all relate to proteases inhibitors that act by binding to the protease substrate. Claim 1 recites "A serine protease inhibitor containing a substance capable of inhibiting the reaction of a serine protease with a substrate thereof by binding itself to said substrate of serine protease in competition with said serine protease.". As taught by Cook et al, 1995, the serine protease thrombin activates the thrombin receptor by binding to and cleaving the N-terminus resulting in a new N-terminus, that functions as a tethered ligand (p2968, col1, parg1). Cook et al, 1995 clearly teach an antibody that binds to a thrombin receptor at the thrombin binding site, thereby inhibiting the ability of thrombin to bind, cleave, and activate said receptor (pg 2962, parg4, lines1-6; Fig 4). Thus, the antibody of Cook et al functions as a serine protease inhibitor capable of inhibiting the reaction of a serine protease with a substrate thereof by binding itself to said substrate of the serine protease in competition with said serine protease. Therefore, restriction for examination purposes as indicated is proper and is hereby made FINAL.

### *Specification-Objections*

The application appears to be a inadequate translation of a foreign document; the specification and abstract are objected to for poor grammar and sentence construction. Some

examples are listed below. These examples are not meant to be a complete analysis; the application should be carefully edited.

Page 2 lines 20 & 21: "...the hydrolysis with a protease is made to proceed by the metastasis of the acyl moiety..."

Page 2 lines 23-27: "In the animate nature, such protease inhibitors as strongly bond themselves to certain species of protease specifically and reversibly inhibit their enzymatic activities also exist and fulfill the function of controlling relevant protease actions."

Abstract line 1: "A serine protease inhibitor which is capable of selectively inhibiting exclusively the enzymatic activity of a serine protease aimed at is provided."

Abstract line 14: "...an agent for curing disseminated intravascular coagulation."

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

***Claims-Objections***

In Claim 1 lines 4-5, a "the" should be inserted: "...substrate of [the] serine protease...".

For clarity of Claim 2, on line 5 a comma should be inserted: "...said serine protease [,] is a substance...".

For clarity of Claim 4, on line 5 a comma should be inserted: "...serine protease [,] is an anhydridized...".

Claim 7 is objected to for having a hard bracket "[" on line 1. Correction is required.

For clarity of Claim 7, lines 8-11 should be rewritten as "... mentioned, and at least step (3) is carried out in the presence of at least one of polyhydric alcohols or saccharides.".

For clarity of Claim 8, line 2 should be rewritten as "...wherein the alkali treatment step is ...".

Claims 6-8, and 10-13 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from a multiple dependent claim. See MPEP § 608.01(n). For purposes of examination, it is assumed that said claims depend from Claim 1.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

***Utility***

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Claim 13 recites an agent for curing disseminated intravascular coagulation. The deduction that the protease inhibitors recited in Claim 5 may be used for treatment of disseminated intravascular coagulation is credible based the known function of blood clotting factors II, VII, IX, and X and the fact that inhibitors of coagulation have been shown to be useful in the treatment of disseminated intravascular coagulation (De Jong et al, 1998; pg 772, section 2.2). However, as stated in Claim 13, the recited utility for the protease inhibitors of Claims 1-9 is to cure disseminated intravascular coagulation. According to Steadman's Medical Dictionary ($26^{th}$ Ed) the definition of cure is: (1) To heal; to make well (2) A restoration to health, while the definition of treat is: To manage a disease by medicinal, surgical, or other measure; to care for a patient medically or surgically. The use of any agent to cure disseminated intravascular

coagulation cannot be considered to be a credible utility because, as shown by the art, disseminated intravascular coagulation cannot be cured at this time (De Jong et al, 1998; pg 774, parg 4, lines 4-7). Furthermore, the specification does not teach how to cure disseminated intravascular coagulation; for example, by teaching the needed dose and how to administer the recited serine protease inhibitors in order to cure disseminated intravascular coagulation. Therefore, Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is not supported by a credible or established utility.

***Double Patenting***

It is noted that copending Application SN# 10/018,251 is entitled "Method and substance for inhibiting reaction between activated blood coagulating factor and substrate" and SN# 10/018,815 is entitled "Human antithrombin variants" suggesting that, the claims of 10/018,251 and/or 10/018,815 may recite the same or overlapping inventions as this application. Since 10/018,251 and 10/018,815 are not presently available for review, no determination has been made as to whether or not a double patenting rejection over the claims from 10/018,251 and/or 10/018,815 should be applied to the claims of the instant application. If, upon availability of the above applications to the Examiner, it is determined that there are conflicting claims between 10/018,251 and/or 10/018,815 and the instant application, double patenting will not be considered as new ground(s) of rejection.

***Claim Rejections - 35 USC § 112-Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "similar" in claim 2 is a relative term, which renders the claim indefinite. The term "similar" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Claim 3, as dependent from Claim 2 is rejected for the same reason.

Claims 5, 6, 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In Claim 5, the phrase "activating blood coagulating factor II" is unclear. There is no protease with the name activating blood coagulating factor II and said phrase has at least two interpretations. Is the applicant's intention to recite activated blood coagulating factor II or blood coagulating factor II? The same issue applies to the phrases "activating blood coagulating factor VII", "activating blood coagulating factor IX", and "activating blood coagulating factor X". Clarification is required. Claims 6 and 10-13, which are dependent on Claim 5, are rejected for the same reason. For purposes of examination, it is assumed applicant's intention is to recite activated blood coagulating factor II, activated blood coagulating factor VII, activated blood coagulating factor VII, and activated blood coagulating factor X.

***Claim Rejections - 35 USC § 112-First Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 13 is rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a credible asserted utility or a well established utility for the reasons set forth above under 35 U.S.C. 101, one skilled in the art clearly would not know how to use the claimed invention.

Claims 1, 2, 4-8, and 10-13 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the serine protease inhibitors, anhydridized blood coagulating factor II, anhydridized blood coagulating factor VIII, anhydridized blood coagulating factor IX, and anhydridized blood coagulating factor X wherein anhydridization is at the active-site serine residue, the specification does not reasonably provide enablement for any serine protease inhibitor which binds the substrate of any serine protease. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Claim 1 is so broad as to encompass any serine protease inhibitor that competes with a serine protease for binding to a substrate. Claim 2 is so broad as to encompass any serine protease inhibitor that competes with a serine protease for binding to a substrate wherein the inhibitor has a structure similar to a serine protease but doesn't have enzymatic activity. Claim 4 is so broad as to encompass any serine protease inhibitor that competes with a serine protease for binding to a substrate wherein the inhibitor is an anhydridized serine protease. Claim 5 is so broad as to encompass any serine protease inhibitor that competes with a serine protease for binding to a substrate wherein the inhibitor is anhydridized blood coagulating factor II, anhydridized blood coagulating factor VIII, anhydridized blood coagulating factor IX, or

anhydridized blood coagulating factor X. Claim 6 is so broad as to encompass any serine protease inhibitor that competes with a serine protease for binding to a substrate wherein the inhibitor is an anhydridized serine protease and wherein the site of anhydridization is an active serine residue. The scope of each of these claims is not commensurate with the enablement provided by the disclosure with regard to the extremely large number serine protease inhibitors broadly encompassed by the claims. Since the amino acid sequence of a protein determines its structural and functional properties, predictability of which changes can be tolerated in a protein's amino acid sequence and obtain the desired serine protease inhibitor activity requires a knowledge of and guidance with regard to which amino acids in the protein's sequence, if any, are tolerant of modification and which are conserved (i.e. expectedly intolerant to modification), and detailed knowledge of the ways in which the protein's structure relates to its function. However, in this case the disclosure is limited to the protease inhibitors anhydridized blood coagulating factor II, anhydridized blood coagulating factor VIII, anhydridized blood coagulating factor IX, and anhydridized blood coagulating factor X, wherein anhydridization is at the active-site serine residue.

While recombinant and mutagenesis and anhydridization techniques are known, it is not routine in the art to screen for multiple substitutions or multiple modifications, as encompassed by the instant claims, and the positions within a protein's sequence where amino acid modifications can be made with a reasonable expectation of success in obtaining the desired activity/utility are limited in any protein and the results of such modifications are unpredictable. In addition, one skilled in the art would expect any tolerance to modification for a given protein

to diminish with each further and additional modification, e.g. multiple substitutions or anhydridizations.

The specification does not support the broad scope of Claim 1, which encompasses any serine protease inhibitor that competes with a serine protease for binding to a substrate. The specification does not support the broad scope of Claim 2, which encompasses any serine protease inhibitor that competes with a serine protease for binding to a substrate wherein the inhibitor has a structure similar to a serine protease but doesn't have enzymatic activity. The specification does not support the broad scope of Claim 4, which encompasses any serine protease inhibitor that competes with a serine protease for binding to a substrate wherein the inhibitor is an anhydridized serine protease. The specification does not support the broad scope of Claim 5, which encompasses any serine protease inhibitor that competes with a serine protease for binding to a substrate wherein the inhibitor is anhydridized blood coagulating factor II, anhydridized blood coagulating factor VIII, anhydridized blood coagulating factor IX, or anhydridized blood coagulating factor X. The specification does not support the broad scope of Claim 6, which encompasses any serine protease inhibitor that competes with a serine protease for binding to a substrate, wherein the inhibitor is an anhydridized serine protease and wherein the site of anhydridization is an active serine residue. The specification does not support the broad scope of Claims 1, 2, and 4-6 because the specification does not establish: (A) the structure of all types of serine protease inhibitors that function by competing with a serine protease for binding to a substrate; (B) regions of any serine protease inhibitor's protein structure which may be modified without effecting the function of being serine protease inhibitor; (C) the general tolerance of the function of any serine protease inhibitor to modification and extent of such

tolerance; (D) a rational and predictable scheme for modifying any residues with an expectation of obtaining the desired biological function; and (E) the specification provides insufficient guidance as to which of the essentially infinite possible choices is likely to be successful.

Since Claims 7 and 8 recite methods of making the serine protease inhibitors recited in Claims 4-6 and Claims 10-13 recite compositions comprising the serine protease inhibitors recited in Claims 1, 2, and 4-8, Claims 7, 8, and 10-13 are rejected under 35 U.S.C. 112, first paragraph for the same reasons discussed above.

Thus, applicants have not provided sufficient guidance to enable one of ordinary skill in the art to make and use the claimed invention in a manner reasonably correlated with the scope of the claims broadly including any number of serine protease inhibitors. The scope of the claims must bear a reasonable correlation with the scope of enablement (In re Fisher, 166 USPQ 19 24 (CCPA 1970)). Without sufficient guidance, determination of the identity of sequences having the desired biological characteristics is unpredictable and the experimentation left to those skilled in the art is unnecessarily, and improperly, extensive and undue. See In re Wands 858 F.2d 731, 8 USPQ2nd 1400 (Fed. Cir, 1988).

Claims 1, 2, 4-8, and 10-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

These claims are directed to a genus of serine protease inhibitors. The specification teaches the structure of only a four representative species of such inhibitors. Moreover, the specification fails to describe any other representative species by any identifying characteristics

or properties other than the functionality of being a serine protease inhibitor. Given this lack of description of representative species encompassed by the genus of the claims, the specification fails to sufficiently describe the claimed invention in such full, clear, concise, and exact terms that a skilled artisan would recognize that applicants were in possession of the claimed invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Harmon et al, 1986 (in IDS). Harmon et al teach PPACK-thrombin, a catalytically inactive derivative of thrombin, which competes with thrombin binding to the thrombin receptor (Fig 1) and antagonizes thrombin-induced activation of the receptor (Fig 5). Therefore, Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Harmon et al, 1986. Since Claims 10-13 recite compositions containing the inhibitor of Claims 1 and 2, Claims 10-13 are rejected under 35 U.S.C. 102(b) for the same reasons.

Claims 1, 2, 4, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Paetzel et al 1997 as evidenced by Tschantz et al, 1993. Paetzel et al teach an anhydridized serine protease, anhydridized leader peptidase, which is catalytically inactive (Fig 5). Inhibition of the enzymatic activity of leader peptidase is due to anhydridization of the active site lysine, $Lys^{145}$ (Fig 6). A prior report from the same group teaches that, mutation of $Lys^{145}$ to Ala also produces a leader peptidase that is proteolytically inactive and competes with the wild-type

protease for binding of substrate (Tschantz et al, Figs 4 & 6). Since leader peptidase with an altered $Lys^{145}$ is catalytically inactive and competitively blocks binding of the wild-type leader peptidase with substrate, the anhydridization leader peptidase of Paetzel et al is inherently an inhibitor of wild-type leader peptidase. Therefore, Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Paetzel et al 1997. Since Claims 10-13 recite compositions containing the inhibitors of Claims 1, 2, and 4, Claims 10-13 are rejected under 35 U.S.C. 102(b) for the same reasons.

Claims 1, 2, 4-8 and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ashton et al, 1995 (in IDS) as evidenced by Arcone et al, 1999. Ashton et al teach a variant of activated blood coagulating factor II that is anhydridized on the active-site serine residue, $Ser^{205}$ (Table 2). The variant of Ashton et al competes with wild-type activated blood coagulating factor II for binding to hirudin, a substrate analog (pg 6460, parg 7). As evidenced by Arcone et al, 1999 mutation of the active-site serine, $Ser^{205}$, of coagulating factor II results in a catalytically inactive protease (Fig 1) that competes with the parent wild-type protease for binding to a thrombin receptor (Fig5C). Thus, the anhydridized variant of Ashton et al is inherently an inhibitor of coagulating factor II. Furthermore, Ashton et al teach that activated blood coagulating factor II anhydridized on the active-site serine can be prepared by incubation with the protease inhibitor PMSF followed by alkali treatment and collection. Therefore, Claims 1, 2, 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ashton et al, 1995 as evidenced by Arcone et al, 1999. Since Claims 10-13 recite compositions comprising the inhibitors of Claims 1-9, Claims 10-13 are rejected under 35 U.S.C. 102(b) for the same reasons.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4-8, and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paetzel et al 1997 in view of Berkner et al, 1998 and further in view of Ashton et al, 1995. The teachings of Paetzel et al are described above. Paetzel et al do not teach anhydridized serine protease inhibitors derived from clotting factors II, VII, IX, or X wherein anhydridization is at the active site serine residue. Berkner et al teach a variant of clotting factor VII in which the active site serine is mutated to alanine. Said variant of clotting factor VII blocks binding of wild-type factor VII (Example III) and blocks blood coagulation (Table 2). Thus, the variant clotting factor VII of Berkner et al functions as a serine protease inhibitor, which possesses a structure similar to the structure of the wild-type protease wherein the active site serine is modified. It would have been obvious to a person of ordinary skill in the art to use the teachings of Paetzel et al to prepare a clotting factor VII inhibitor, wherein said inhibitor is clotting factor VII anhydridized at the active site serine. Likewise, it would have been obvious to a person of ordinary skill in the art to use the teachings of Paetzel et al to prepare clotting factor II, IX, and X inhibitors wherein said inhibitors are clotting factors II, IX, and X anhydridized at the active site serine. The use of the teachings of Paetzel et al, to prepare a clotting factor VII inhibitor anhydridized at the active site serine, is suggested by Paetzel, in view of Ashton et al, 1995. Paetzel et al teach that anhydridization is method for further investigating the role of active-site

amino acid residues in the function of proteases (pg 9994, parg 6, lines 1-3), while, as discussed above, Ashton et al, 1995 teach that serine residues can be anhydridized. Motivation to use the teachings of Paetzel et al in view of Berkner et al and further in view of Ashton et al, 1995 to prepare variants of clotting factors II, VII, IX, and X anhydridized at the active-site serine derives from the ability to use said variants to study the role of the active-site serine in the function of clotting factors II, VII, IX, and X as well as to use said variants as inhibitors of their respective wild-type proteases. The expectation of success is high as, a protease anhydridized at the active-site lysine functions as a competitive inhibitor of the parent wild-type protease and serine residues can be anhydridized. Therefore, Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paetzel et al 1997 in view of Berkner et al, 1998 and further in view of Ashton et al, 1995. Since Claims 7 and 8 recite methods of making the serine protease inhibitors recited in Claims 4-6, while Claims 10-13 recite compositions comprising the serine protease inhibitors recited in Claims 1, 2, and 4-8, Claims 7, 8, and 10-13 are rejected under 35 U.S.C. 103(a) for the same reasons discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan L. Swope whose telephone number is 703-305-1696. The examiner can normally be reached on M-F; 9:30-7 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy can be reached on 703-308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Sheridan L. Swope, Ph.D.

REBECCA E. PROUTY
PRIMARY EXAMINER
GROUP 1600